

## RPC Module Assembly Check List

Module barcode \_\_\_\_\_

Date Started \_\_\_\_\_

Lower gas gap \_\_\_\_\_

Upper gas gap \_\_\_\_\_

Date Finished \_\_\_\_\_

- \_\_\_1. Get and clean an aluminum frame and place capton tape on the HV slot
- \_\_\_2. Put cleaned mylar case sheet in case and cut a slot for the HV connection
- \_\_\_3. Roll out copper foil in Module case
- \_\_\_4. Peel the plastic off of the bottom of the lower gas gap and scan it into the database
- \_\_\_5. Place mylar sheet on the gas gap, cut a slot for the HV connection and secure with capton tape
- \_\_\_6. Lay the gap in the case (mylar down) and pull the plastic off of the other side.
- \_\_\_7. Check position of gas gap and then place the gas tubes through the casing
- \_\_\_8. Splice HV cables (use 3 layers of insulation)
- \_\_\_9. Put spacers in parallel ends of case to keep gap from moving.
- \_\_\_10. Set clean signal plane on gap surface and use capton tape to secure it to the gap.
- \_\_\_11. Place capton tape over solders along the ends of the signal plane to insulate from ground
- \_\_\_12. Peel plastic off of the top of the upper gas gap then place/secure mylar sheet and cut slot for HV
- \_\_\_13. Flip gap over and peel plastic off of other side then place the gap on the signal plane (mylar up)
- \_\_\_14. Check to verify position of the signal wires with respect to the slots in the case.
- \_\_\_15. Run ground wire and wrap/solder the signal grounds. Use a copper sheet to protect the gap
- \_\_\_16. Run the HV cables along the side of the gap then splice them together
- \_\_\_17. Double check the gap alignment then place the gas tubes though casing.
- \_\_\_18. Clean surface of mylar and make sure that the HV cables are laying next to the gap not on it
- \_\_\_19. Cut a slot in the copper foil for the HV connection then fold it over and close it with tape
- \_\_\_20. Secure the readout wires in there slots with rubber and electrical tape
- \_\_\_21. Cut the grounds to there proper lengths crimp on the connectors and secure them to the case
- \_\_\_22. Solder readout strip ground to the copper foil. Make sure solder joint is not over the gas gap
- \_\_\_23. Place cleaned mylar sheet labeled "casing" over the copper and cut a slot for the HV connection
- \_\_\_24. First make sure everything is properly placed then secure cover to the top of the rpc module.

comments \_\_\_\_\_

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Worker \_\_\_\_\_